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Gilbert Garcia,
Network Engineer, Getronics Inc.

Network Troubleshooting

by Othmar Kyas

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AUTHOR: Othmar Kyas
TECHNICAL CONTRIBUTORS: Bill Message, Gregan Crawford, Thomas Heim, Luis Hernandez, Raul Sitavi, Peter Scharpfenecker, Roland Tscheinig, Christopher Semturs, Hans Juergen Gauch, Christian Dinten, Duane Lotharius, Sandy McKinsey
EDITOR: Clelia deMoraes
PAGE LAYOUT: Jörg Nestle
COVER DESIGN: Jörg Nestle, Peter Przybylla
PRODUCT MARKETING MANAGER: Pamela Frankenfield
PROJECT MANAGER: Melissa Ames
CORE PROJECT TEAM: Tony Crawford, Michelle Gyulai, Pat Huppenthal, Phil Sexton, Dan Van Wijk
PROGRAM SUPERVISOR: Karen Spahr

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Introduction

The challenge to design, deploy and operate communications networks is daunting. The gap between the availability of skilled network operators and the need for them is widening. With the proliferation of new technologies, the expectations for high availability of services and applications, and the demand for interoperability between networks, the knowledge and experience of these people becomes more critical.

How can network operators develop the skills and expertise to be successful in this changing environment? They need to understand how different services and applications affect network design, vendor selection, configuration, commissioning and optimization. As applications become increasingly critical to business, outages and poor performance become intolerable. Network operators need the expertise and experience to deal with a wide range of problems and technologies. Training must not only focus on networking technologies, services and applications, but also on the tools and techniques to deploy, troubleshoot and optimize them.

What tools can help network operators do their jobs more effectively? Tools must be sophisticated in terms of diagnostic capabilities, while being easy to operate. They need convenient connection to the network. They must observe all activity or conditions on the network, while determining which ones are relevant to troubleshooting or optimization. They must address all the technologies used in the network for delivering the offered services or in running the deployed applications. They need to identify the causes of network problems and to recommend how these problems can be resolved.

Even though there are many courses and books on networking technologies, very few cover the practical aspects of troubleshooting and optimizing networks, services and applications. This book endeavors to fulfill this need. It provides information about technologies and techniques that is essential to get networks, services and applications up and keep them running effectively, and it provides a comprehensive and consolidated set of potential causes for different problem symptoms.

There is a critical need to collect and compile this kind of information and make it readily available to network operators to help them isolate, characterize and solve problems more effectively and quickly.

With the help of many contributors, Othmar Kyas has created an indispensable reference book for troubleshooting and optimizing networks, services and applications. If you are interested in contributing to subsequent revisions, please contact Othmar Kyas by email at *Othmar_Kyas@Agilent.com*.

Bill Mortimer
Vice President and General Manager
Communications Services Solutions
Agilent Technologies, Inc.

About the Author

Othmar Kyas is the Product Marketing Section Manager for the Network Systems Test Division of Agilent Technologies. With over 11 years at Agilent (formerly Hewlett-Packard), Othmar has led the way in developing Agilent's telecommunications products. Othmar holds an M.S. degree in Electrical Engineering from the University of Technology, Vienna, which has enabled him to contribute significantly to Agilent's product offerings in WAN, LAN, and ATM technologies.

In addition to speaking at seminars and trade shows, Othmar is recognized internationally as a renowned author of several books in data communications and telecommunications. Many of these have been translated into Japanese, Danish, Russian, English, and German. Books authored by Othmar include the following:

- ATM Networks
- Internet Security
- Corporate Intranets
- Fast Ethernet
- Internet for Professionals
- LAN/WAN Troubleshooting